

REMARKS

Claims 8-13 remain pending. Independent claims 8 and 13 have been amended.

Applicants' undersigned attorney thank the Examiner for the courtesy extended during the telephonic interview of April 5, 2010. In the interview, proposed amended claims 8 and 13 were discussed in relation to Johnson, U.S. Patent No. 6,181,796 and Wert, U.S. Patent No. 4,382,156. Claims 8 and 13 as amended herein are the same as proposed amended claims 8 and 13 discussed in the April 5 interview, with the exception that herein, the term "signal" has been deleted from line 9 of claim 13, and in line 11 of claim 13, the term "connected" has been replaced with the term "coupled." During the interview, the following points were made by applicants' representative.

The amendments to claims 8 and 13 are supported by Fig. 1 of the application. The figure illustrates the signal input to terminal S1 as a sinewave having a particular phase. The signal input to terminal S2 is a phase-delayed version of the sinewave applied to terminal S1. This is shown by the solid-line sinewave, corresponding to S2, being slightly phase-delayed relative to the dashed-line sinewave corresponding to S1. The same is true for the signals applied to terminals S3-Sn relative to the signal applied to terminal S1. Thus, Fig. 1 supports the claim 8 limitation, "the first driving signal received by the first speaker and the second driving signal received by the second speaker are generated from one signal" and the claim 13 limitation, "the input signals are generated from one signal."

Each of claims 8 and 13 call for inverse phase [an inverter] and a predetermined delay. Specifically, claim 8 specifies that "the second speaker receives a second

driving signal, having an inverse phase and a predetermined delay relative to the first driving signal." Claim 13 specifies "a plurality of inverters" which are "alternately disposed between the N driving circuits and the N input terminals" and in the last wherein clause, "the input signals which have same components, and to which predetermined delays are given, are input to the input terminals, respectively." The claimed predetermined delay is supported by Fig. 1 as explained in the above paragraph. The inverse phase [inverter] is shown by the alternate inverters, I2, I4, In of Fig. 1.

The Johnson reference (U.S. Patent No. 6,181,796) admittedly shows an inverter (e.g., reference No. 120 in Figs. 3 and 5), but the reference does not disclose both an inverter [inverse phase] and a predetermined delay, as called for by claims 8 and 13.

Additionally, each of Johnson and Wert (U.S. Patent No. 4,382,157) which are relied upon in the section 103 rejection of the claims, concerns stereophonic systems (see Abstracts and drawings of each reference). Their teaching differ markedly from the speaker array system of the present invention. In any event, the references, individually or in combination, do not meet the claim 8 limitation that "the first driving signal received by the first speaker and the second driving signal received by the second speaker are generated from one signal" or the claim 13 limitation that "the input signals are generated from one signal." A stereophonic system does not meet these limitations.

The present invention, as claimed in claims 8 and 13, not only includes the wiring saving aspect, noted by the Examiner during the interview, it also includes the aspect that the magnitude of "the predetermined delay" affects the current (driving) signals of

adjacent speakers in the speaker array. Since the combination of Johnson and Wert does not disclose "the predetermined delay" the combination does not render the claims obvious for this additional reason.

For the above reasons, each of independent claims 8 and 13 distinguishes over the cited references. Claims 9-12 distinguish over the cited references at least for the reason that they depend from independent claim 8.

In view of the foregoing amendment and remarks, applicants believe that the claims are in condition for allowance. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (213) 488-7100 to discuss the steps necessary for placing the application in condition for allowance should the Examiner believe that such a telephone conference call would advance prosecution of the application.

Respectfully submitted,

PILLSBURY WINTHROP SHAW PITTMAN LLP

Date: May 5, 2010

By:


Roger R. Wise
Registration No. 31,204
Customer No. 27496

725 South Figueroa Street, Suite 2800
Los Angeles, CA 90017-5406
Telephone: (213) 488-7100
Facsimile: (213) 629-1033